



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Satoshi Ito et al.	Examiner: Carol M. Koslow
Serial No.: 10/618,144	Art Unit: 1755
Filed: July 10, 2003	
Title: Phosphor, Method For Producing Phosphor And Its Precursor and Display Device	

Commissioner for Patents  
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**DECLARATION UNDER 37 C.F.R. § 1.132**

I, Naoko FURUSAWA, hereby declare as follows:

1. I am a post graduate of Waseda University having been awarded a Masters Degree in Applied Physics in 1989.
2. I have been employed by KONICA Corporation (now Konica Minolta Medical & Graphic, Inc.) since 1989, and have been engaged in the research and study of silver halide emulsions and inorganic phosphors.
3. I am a co-inventor of the present application.
4. I, or those under my supervision, have conducted the following tests.
5. Comparative tests

**Samples**

For comparison, the following phosphors were employed.

- Comparative sample 3 is a phosphor disclosed in US 3,541,019 as Example 1.
- Comparative sample 4 is a phosphor disclosed in US 6,576,156 as Example 1.
- Comparative sample 5 is a phosphor disclosed in WO 00/71,636 as Example 1.

For the claimed phosphor, Examples 1-1 and 2-1 disclosed in the description of the present application were employed.

### Evaluation of the samples

The samples were measured for luminescence intensity, mean particle size, ratio of particles having uniform composition distribution of constituting elements, and coefficient of variation of inter-particle distribution of content of constituting elements.

### Results

The results of the comparative test are shown in Table 10. The shown luminescence intensities are relative intensities where the luminescence intensity of Example 1-1 is taken as 100. The listed properties of Example 1-1 are also disclosed in the original description.

TABLE 10

	LUMINESCENCE INTENSITY (%)	MEAN PARTICLE SIZE ( $\mu$ m)	RATIO OF PARTICLES *1	COEFFICIENT OF VARIATION *2
COMPARATIVE EXAMPLE 3	87	2.3	36%	65%
COMPARATIVE EXAMPLE 4	91	1.3	42%	59%
COMPARATIVE EXAMPLE 5	96	0.49	45%	55%
EXAMPLE 1-1 OF THE INVENTION	100	0.52	85%	15.2%
EXAMPLE 2-1 OF THE INVENTION	118	0.53	94%	11.3%

\*1 Ratio of particles having uniform composition distribution of constituting elements.

\*2 Coefficient of variation of inter-particle distribution of content of constituting elements.

As apparent from Table 10, Example 1-1 and 2-1 are superior to Comparative Examples 3 to 5 in the measured properties.

PATENT  
Attorney Docket No: 47539.00024**Conclusions**

6. I believe the phosphor of the invention is distinct from the phosphors disclosed in US 3,541,019, US 6,576,156 and WO 00/71,636, and a person of ordinary skill in the art would not find it obvious from those references.

7. I hereby declare that all statements made herein of my own knowledge are true and that all statements made upon information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Executed on this Jun 29, 2005.By: Naoko Furusawa  
Naoko FURUSAWA